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Environmental Information Database

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Edited by
Deepti Joshi
P. William Reidhead

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Report authored by

Energy Environment Interface

Tata Energy Research Institute

Darbari Seth Block

Habitat Place, Lodhi Road

New Delhi - 110 003 / India

Telephone (+91 11) 462 2246, 460 1550

Fax (+91 11) 462 1770, 463 2609

Cable TERINST, New Delhi - 110 003

e-mail mailbox@teri.ernet.in

Forest management (forest area in ha)

Officially managed								
Protected	40,180,000	40,180,000	41,492,000	41,492,000	21,730,000	21,730,000	23,308,000	23,308,000
Not managed	13,730,000	13,730,000	13,270,000	13,270,000	13,730,000	13,730,000	12,208,000	12,208,000
Sanctuary								
<i>Transfer between forestry and other sectors (ha)</i>								
Net to settlement	7,837,590	3,068,807	1,196,311					
Net to agriculture	2,623,000							
Net to industry	134,000							
Net to rangeland								
Net to roads etc	563,000							
<i>Forest area and loss</i>								
Forest and woodland area (000 ha)								
% of forest and woodland	64,204	64,013	63,918					
Closed forest (000 ha)	20	19	19					
Open forest (000 ha)	36,141	37,847	38,500					
Deforestation of closed forest (000 ha/ha)	27,658	25,740	24,903					
Deforestation of open forest (000 ha/ha)								
Deforestation of all forest (000 ha/ha)								
Deforestation of all forest (ha/000 capita)								
<i>Reforestation</i>								
Reforestation (000 ha/ha)								
Reforestation (ha/000 capita)								
<i>Trade in forestry products</i>								
Total roundwood production (000 m ³)	243,056	248,629	253,341	258,042	264,203	268,269	274,460	279,801
Fuelwood and charcoal production (000 m ³)	220,608	225,446	230,266	235,097	239,979	244,948	250,040	255,279
Industrial roundwood production (000 m ³)	23,015	23,941	24,035	24,129	24,224	24,321	24,420	24,522
Saw logs and veneer logs production (000 m ³)	17,518	18,350	18,350	18,350	18,350	18,350	18,350	18,350
Sawnwood and sleepers production (000 m ³)	15,907	17,460	17,460	17,460	17,460	17,460	17,460	17,460
Wood based panels production (000 m ³)	442	442	899	442	442	442	442	442
Wood pulp production (000 m ³)	1,208	1,208	1,208	1,208	1,208	1,208	1,208	1,208
Paper and paper board production (000 m ³)	1,557	1,590	1,810	1,910	1,940	1,940	1,940	1,940
Import of forestry products (000 US\$)	211,253	207,829	299,043	291,585	344,895	331,168	399,116	523,264
Export of forestry products (000 US\$)	16,372	15,088	17,033	17,255	22,752	29,204	39,257	39,911
								16,789

	129580	1461	148900	13500	2589	11600000
Degraded land area (000 ha)						
Degraded irrigated land (000 ha)						
Areas affected by shifting cultivation (000 ha)						
Deforestation rate (000 ha/a)						
Total salt affected land (000 ha)	7180	7044				
Salinization rate (000 ha/a)						
<i>Soil erosion</i>						
Average annual soil erosion rate (000 ton/ha)						
water erosion (000 ton/ha)						
wind erosion (000 ton/ha)						
<i>Wetlands</i>						
Total wetlands (000 ha)						
Estuaries (000 ha)						
Mangrove forests (000 ha)						
Open coasts (000 ha)						
Floodplains (000 ha)						
Freshwater marshes (000 ha)						
Lakes (000 ha)						
Peatlands (000 ha)						
Swamp forest (000 ha)						
Freshwater wetland (000 ha)						
Salt water wetland (000 ha)						
Man-made wetland (000 ha)						
<i>Waterlogging</i>						
Waterlogging areas (ha)						

Country India Land Desertification

ENVIRONMENTAL INFORMATION DATABASE

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Range lands												
Total area (000 ha)		11780	11840	11820	11760	11720	11800					
Affected by desertification (000 ha)												
Affected by desertification (%)												
Rainfed croplands												
Total area (000 ha)		86620	83820	79900	81400	80990	80460					
Affected by desertification (000 ha)												
Affected by desertification (%)												
Irrigated lands												
Total area (000 ha)		42000	41800	42100	42500	43000	45200	43100	45800			
Affected by desertification (000 ha)												
Affected by desertification (%)												
Forest and woodlands												
Total area (000 ha)		66700	66400	67000	66700	67000	67100	66700	67000			
Affected by desertification (000 ha)												
Affected by desertification (%)												

Table 1.4 Land Landuse

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Crop land (000 ha)		168950		168990		169450		168990		169080		169700
Permanent meadows and pasture (000 ha)		12002	11934	11977	11880	11850	11796	11780	11770			
Forest and wood land (000 ha)		66700	66400	67000	66700	67000	67100	66700	67000			
Irrigated land (000 ha)		42300	41800	42100	42500	43000	45200	43100	45800			
Non-irrigated land (000 ha)		123600	124000	123300	123600	122600	120800	125980	123900			
Other land (000 ha)		50035		49749	49019	49433	49759	48849				
Total land area (000 ha)		297319	297319	297319	297319	297319	297319	297319	297319			
Crop land (%)		56.82		56.84		56.99		56.84		57.08		
Permanent meadows and pasture (%)		4.03	4.01	4.03	4	3.99	3.97	3.96	3.96			
Forest and wood land (%)		22.43	21.66	22.53	22.43	22.53	22.57	22.43	22.53			
Irrigated land (%)		14.13	14.06	14.16	14.29	14.46	15.20	14.50	15.40			
Non-irrigated land (%)		41.57	41.71	41.61	41.57	41.24	40.63	42.3	41.7			
Other land (%)		16.83		16.75		16.49		16.63		16.74		16.43

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Waste Production (ton/y)</i>											
Municipal waste											
1.07 x 10 ⁴											
1.09 x 10 ⁴											
Industrial waste											
5.0 x 10 ⁴											
Agricultural waste											
1.16 x 10 ⁴											
Mining waste											
1.14 x 10 ⁴											
Radio active waste											
1.21 x 10 ⁴											
<i>Percentage of waste treated</i>											
Municipal waste											
1.441 x 10 ⁶											
Industrial waste											
1.523 x 10 ⁶											
Agricultural waste											
604 x 10 ⁶											
Mining waste											
Radio active waste											
Incineration on land											
Incineration at sea											
Dumping at sea											
Fuel blending											
Physical/chemical treatment											
Solidification/encapsulation											
Co-disposal facilities											
Landfills for hazardous wastes											
Stockpiling of wastes											
Export of waste											
Sewer discharges											
River discharges											
Costal discharges											
<i>Waste recycled by category (quantity)</i>											
Municipal waste											
1.23 x 10 ⁴											
Industrial waste											
1.26 x 10 ⁴											
Agricultural waste											
1.28 x 10 ⁴											
Mining waste											
1.31 x 10 ⁴											
Radio active waste											

Surface water		Most important river / lake		Name of river / lake		Ganga		Kanpur (Jyamu) downstream		Kanpur (Jyamu) downstream		Kanpur (Jyamu) downstream	
Station	Test date	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
Temperature (F)	25.1	25.8	25.6	24.8	25	24.2	24.2	25.5					
pH	8	7.6	7.3	7.9	7.7	7.5	7.5	7.6					
BOD (mg/l)	8.30	6.90	9.60	10.70	8.50	4.70	4.70	3.80					
Chlorides (1000)	13.83	17.29	13.18	15.22	16.44	11.86	11.86	11.88					
Suspended Solids (mg/l)													
TDS (mg/l)													
Nitrate + Nitrogen + Nitrite (mg/l of N)	2	1.32	9	22	9.37	16.62	16.62	9.86					
Total Kjeldahl Nitrogen													
Phosphorus (mg/l as P)													
Heavy metals													
mercury (mg/l)					0.009	0	0	0	0	0	0	0	
Lead (mg/l)					0.01 - 0.076	0.0 - 0.048	0.012 - 0.063	0	0	0	0	0 - 0.41	
cadmium (mg/l)					0 - 0.003	0 - 0.013	0						
copper (mg/l)					0 - 0.069	0 - 0.039	0 - 0.053						
zinc (mg/l)					0 - 1.258	0.006 - 0.385	0 - 0.323						
chromium (mg/l)					0 - 0.16	0 - 1.55	0.013 - 0.406	0.010 - 0.039	0 - 0.084				
Biofa													
species													
number													
Ground water													
Most important aquifers													
Name of aquifer													
Test date	20.588	34.154	34.324	30.921		28.039	30.03						
TDS (mg/l)													
pH													
Chlorides (mg/l)	265	251	217	222		24.8	24.3						
Subphates (mg/l)	144	72	105	93		87	97						
Sources of pollution (qualitative data)													
Name of most important rivers													
Name of most important lakes													
fs													
Run-off (urban)													

Name of river / lake		Cauvery						Takali					
Test date	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994		
Temperature (F)													
pH	6.72		7.84		7.64		7.89		7.98		7.39		7.65
BOD (mg/l)													
Caliform (1000)													
Suspended Solids (mg/l)	120	13	30				10	18			48		23
TDS (mg/l)	228	280	172	272	629	953					1716		272
Nitrate + Nitrogen + Nitrite (mg/l of N)													
Phosphorous (mg/l as P)	5	8	12	14	21	12	11	11	21				
Heavy metals													
mercury (mg/l)													
lead (mg/l)	10	10	10	38	187	80	95	114					40
cadmium (mg/l)													
copper (mg/l)													
zinc (mg/l)													
chromium (mg/l)													
Biofa													
species													
number													
Ground water													
Most important aquifers													
Name of aquifer													
Test date													
Nitrate (mg/l)													
TDS (mg/l)													
pH													
Chlorides (mg/l)													
Sulphates (mg/l)													
Sources of pollution (quantitative data)													
Name of most important rivers													
Name of most important lakes													
Run-off (urban)													
Industrial effluents													
Domestic													

Surface water
Most important river / lake
Name of river / lake Brahmaputra
Station Takali

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Test date											
Temperature (F)											
pH											
ECOD (mg/l)											
Coliform (1000)											
Suspended Solids (mg/l)											
TDS (mg/l)											
Nitrate + Nitrogen + Nitrite (mg/l) of N											
Phosphorus (mg/l) as P											
Heavy metals											
mercury (mg/l)											
lead (mg/l)											
cadmium (mg/l)											
copper (mg/l)											
zinc (mg/l)											
chromium (mg/l)											
Biofa											
species											
number											
<i>Ground water</i>											
<i>Most important aquifers</i>											
Name of aquifer											
Test date											
Nitrate (mg/l)											
TDS (mg/l)											
pH											
Chlorides (mg/l)											
Sulphates (mg/l)											
<i>Sources of pollution (qualitative data)</i>											
Name of most important rivers											
Name of most important lakes											
Domestic											
Industrial effluents											
Run-off (urban)											

Surface water		Mahanadhi			
Most important river / lake		Name of river / lake			
Station	Takali				
Test date		1984	1985	1986	1987
Temperature (F)					
pH					
BOD (mg/l)					
Coliform (1000)					
Suspended Solids (mg/l)	5.63	3.1			
TDS (mg/l)	14.9	15.5	22.4		
Nitrate + Nitrogen + Nitrite (mg/l of N)					
Phosphorus (mg/l as P)		6.7			
Heavy metals.					
mercury (mg/l)					
lead (mg/l)					
cadmium (mg/l)					
copper (mg/l)					
zinc (mg/l)					
chromium (mg/l)					
Biofa					
species number					
Ground water					
Most important aquifers					
Name of aquifer					
Test date					
Nitrate (mg/l)					
TDS (mg/l)					
pH					
Chlorides (mg/l)					
Sulphates (mg/l)					
Sources of pollution (qualitative data)					
Name of most important rivers					
Name of most important lakes					
Domestic					
Industrial effluents					
Run-off (urban)					

Surface water		Godavari		Afsoot important river / lake		Afsoot important river / lake	
Name of river / lake	Station	Name of river / lake	Station	Name of river / lake	Station	Name of river / lake	Station
Takali		Takali					
	1984		1985	1986	1987	1988	1989
Test date							
Temperature (F)							
pH	7.7	7.7	7.7	7.7	7.9		
BOD (mg/l)							
Coliform (1000)							
Suspended Solus (mg/l)							
TDS (mg/l)	1845	1400	1220	1845	2400		
Nitrate + Nitrogen + Nitrite (mg/l of N)	181	246	232	181	253		
Phosphorus (mg/l as P)							
Heavy metals							
mercury (mg/l)							
Lead (mg/l)	12	13	13	5		19	
cadmium (mg/l)							
copper (mg/l)	119	55	73	119	98	41	149
zinc (mg/l)	58	62	53	79	170	483	95
Biofa							
species							
number							
Ground water							
Most important aquifers							
Name of aquifer							
Test date							
Nitrate (mg/l)							
TDS (mg/l)							
pH							
Chlorides (mg/l)							
Sulphates (mg/l)							
Sources of pollution (qualitative data)							
Name of most important rivers							
Name of most important lakes							
Industrial effluents							
Domestic							
Run-off (urban)							

Surface water	India	India	Inland Water Pollution	Krishna
Most important river / lakes				
Name of river / lake				Krishna
Station	Takali			
Test date		1984	1985	1986
Temperature (F)				7.5
pH				7.45
BOD (mg/l)				
Coliform (100/l)				
Suspended Solids (mg/l)				
TDS (mg/l)		122	130	181
Nitrite + Nitrogen + Nitrite (mg/l of N)		360	281	360
Phosphorus (mg/l as P)				
Heavy metals				
mercury (mg/l)		9	9	4
lead (mg/l)				17
cadmium (mg/l)		116	49	45
copper (mg/l)				12.4
zinc (mg/l)				
chromium (mg/l)		115	68	69
Biofa				196
species number				221
Ground water				195
Most important aquifers				155
Name of aquifer				
Test date				273
Nitrate (mg/l)				295
TDS (mg/l)				
pH				
Chlorides (mg/l)				
Subsulphates (mg/l)				
Sources of pollution (qualitative data)				
Name of most important rivers				
Name of most important lakes				

Run-off (urban)

Industrial effluents

Domestic

Country India Environmental Information Database
Table 2.2 Water Utilization of inland water

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Water resources</i>											
Total annual internal renewable water resources (Km ³ /y)			1330	1850		1850	1850	1850	1850	1850	1850
Per capita internal renewable water resources (000 Km ³ /y)	2.99	2.35			2.27		2.17		2.10		2.103
Per capita river flow (000 Km ³ /y), by river basin											
Name of river basin											
<i>Consumptive use (ground water + surface water)</i>											
Total annual withdrawals (Km ³ /y)			380								
Total annual withdrawal as % of total water resources		18.23									
Per capita withdrawal from water resources (000m ³ /y)											
Sectoral withdrawals as % of total water resources											
- Domestic (%)			3								
- Industry (%)			4								
- Agriculture (%)			93								
<i>Non-consumptive use</i>											
Total hydropower generation (millions KWH)	53966	51039	53839	47462	57884	63760	666094	67520			
Total inland water fish catch (000 ton/y) (excluding marine)	1085	1092	1206	1229	1320	1320	1552	1701			

Country India

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Table 2.3 Water Marine Water Pollution

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Average annual oil spill (000 ton/y) (calculated)		206502				273794	298479	328639	385862	403739	396417
Average annual sediment load (ton/year)											
Average annual untreated industrial waste (bn ton/y)	4.09	4.18	4.27	4.35	4.44	4.53	4.63	4.72	4.82	4.92	5
Average annual untreated domestic waste (ton/y)											
Average annual agricultural wastes (ton/y)											
Fertilizer											
Pesticides/insecticides											
% of urban population in large coastal cities											18.4
Heavy metal concentration (ppm)											
Hg (test date)	4.29-31.87										
Pb (test date)	0.69-5.99										
Cd (test date)	2.12-31.95										
Cu (test date)	36.4-426.5										
Fe (test date)	3.01-6.99										
Mn (test date)	7.78-367.09										
Zn (test date)	0.23-3.12										
Ni (test date)											
Co (test date)											
Average mean monthly sea temperature (degree C)											
Jan	26	26-28	26-28	28	26-28	28	28	26	28	28	28
Feb	26	26-28	26-28	26-28	26-28	28	28	26	26	26	28
Mar	26-28	26-28	26-28	28	26-28	28	26-28	26-28	26-28	26-28	26-28
Apr	28-30	28-30	28-30	30	28	28	30	28	28	28-30	28-30
May	30	28	30	30	28-29	30	30	30	30	30	30
Jun	28	28	28	30	30	28	29	29	30	30	28
Jul	28	28	28	28	28	28	28	28	28	28	28
Aug	27	28	28	28	28	28	28	28	28	28	28
Sep	28	25	28	28	28	28	28	28	28	28	27
Oct	28	28	28	28	28	29	29	29	28	28	27
Nov	28	28	28	28	28	28	28	28	28	28	27
Dec	26-28	26-28	28	28	26	26-28	28	26	28	28	27

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Table 2.3 Water Marine Water Pollution (cont.)						
	1984	1985	1986	1987	1988	1989
<i>Sources of pollution (data available with us - not qualitative data)</i>						
Domestic waste (added to sea @ 60 l/head/d)						
Industrial effluents by coastal industries (m ³ /y)						
River run-off (mean) (km ³ /year)						
Coastal population						
Coastal industries						
Transport oil tanker (oil transported across Arabian sea)						
Oil refinery wastes						
Oil exploration sites						
<i>Sewage and effluents added by rivers to sea</i>						
Solid waste and garbage generated by coastal population (@ 20 kg/h/d)						
Fertilizer used (@ 30.5 kg/ha/year)						
Pesticide used (@ 336 g/ha/year)						
Synthetic detergent						

Table 3.1 Atmosphere and Climate Air Pollution

ENVIRONMENTAL INFORMATION DATABASE

Country: India
Table 3.1 Atmosphere and Climate Air Pollution

ENVIRONMENTAL INFORMATION DATABASE

		DELHI										
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Annual emission (ton/y) in most important cities</i>												
Name of city	DELHI											
CO (Carbon monoxide) in most important cities												
CO2 (Carbon dioxide)												
SO2 (Sulphur dioxide)												
NOx (Nitrogen oxide)												
Pb (Lead)												
CFC (Chlorofluoro-carbon)												
Halon												
CH4 (Methane)												
<i>Atmospheric concentration (mg/m³ of air)</i>												
Name of city												
CO (Carbon monoxide) in most important cities												
CO2 (Carbon dioxide)												
SO2 (Sulphur dioxide)												
NOx (Nitrogen oxide)												
Pb (Lead)												
CFC (Chlorofluoro-carbon)												
Halon												
CH4 (Methane)												
Suspended particulate matter												
Acidity (rainwater pH)												
Percentage of population using air conditioners												
Total num cities												
<i>Source wise emission (ton/y)</i>												
Emission of SPM from	Transport											
Industry												
Agriculture												
Live stock												
Oil and gas production												

Country	India	Source wise emission (ton/sq. km)	DELHI
Emission of CO from			
Transport	Industry		
Agriculture			
Live stock			
Oil and gas production			
Emission of CO2 from			
Transport	Industry		
Agriculture			
Live stock			
Oil and gas production			
Emission of SO2 from			
Transport	Industry		
Agriculture			
Live stock			
Oil and gas production			
Emission of NOx from			
Transport	Industry		
Agriculture			
Live stock			
Oil and gas production			
Emission of Pb from			
Transport	Industry		
Agriculture			
Live stock			
Oil and gas production			
Carbon released annually by deforestation (km ² /ha/yr)			

		ALL INDIA									
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<i>Annual emission (ton/s) in most important cities</i>											
Name of city	ALL INDIA										
CO (Carbon monoxide) in most important cities											
CO2 (Carbon dioxide)											
SO2 (Sulphur dioxide)											
NOx (Nitrogen oxide)											
Pb (Lead)											
CFC (Chlorofluoro-carbon)											
Halon											
CH4 (Methane)											
<i>Atmospheric concentration (mg/m³ of air)</i>											
Name of city	ALL INDIA										
CO (Carbon monoxide) in most important cities											
CO2 (Carbon dioxide)											
SO2 (Sulphur dioxide)											
NOx (Nitrogen oxide)											
Pb (Lead)											
CFC (Chlorofluoro-carbon)											
Halogenated hydrocarbons											
CH4 (Methane)											
Suspended particulate matter											
Acidity (rainwater pH)											
Percentage of population using air conditioners											
Total number of cities											
<i>Source wise emission (ton/s)</i>											
Emission of SPM from	Transport										
Industry											
Agriculture											
Live stock											
Oil and gas production											

Table 3.2 Atmosphere and Climate Change

ENVIRONMENTAL INFORMATION DATABASE

ENVIRONMENTAL INFORMATION DATABASE									
Country		India		Source wise emission (ton/s)		INDIA			
Emission of CO from		Transport							
		Industry							
		Agriculture							
		Live stock							
Emission of CO2 from		Oil and gas production							
		Transport							
		Industry							
		Agriculture							
		Live stock							
National CO2 emission estimates (total) (mn metric tons)		Oil and gas production							
Per capita emissions (metric tons of carbon)		122.5	134.3	143.6	152.1	163.8	176.5	184.2	192
		0.16	0.18	0.18	0.19	0.2	0.22	0.22	0.22
Emission of SO2 from		Transport							
		Industry							
		Agriculture							
		Live stock							
		Oil and gas production							
Emission of NOx from		Transport							
		Industry							
		Agriculture							
		Live stock							
		Oil and gas production							
Emission of Pb from		Transport							
		Industry							
		Agriculture							
		Live stock							
		Oil and gas production							
Carbon released annually by deforestation(ton/ha/yr)									

Country: India
Table 4: 1 Biodiversity Loss of Biodiversity

ENVIRONMENTAL INFORMATION DATABASE

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Flora												
Fungi	no of species Known											
	no of species Endemic											
	no of species Threaten											
	no of species Known											
	no of species Endemic											
	no of species Threaten											
Algae	no of species Known											
	no of species Endemic											
	no of species Threaten											
Dicotyledons	no of species Known											
	no of species Endemic											
	no of species Threaten											
Monocotyledons	no of species Known											
	no of species Endemic											
	no of species Threaten											
Other plants	no of species Known											
	no of species Endemic											
	no of species Threaten											
Fauna												
Mammals	no of species Known	372	372	372	372	372	372	372	372	372	372	372
	no of species Endemic	37	37	37	37	37	37	37	37	37	37	37
	no of species Threaten	77	77	77	77	77	77	77	77	77	77	77
Birds	no of species Known	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228	1228
	no of species Endemic	42	42	42	42	42	42	42	42	42	42	42
	no of species Threaten	47	47	47	47	47	47	47	47	47	47	47
Amphibians	no of species Known	204	204	204	204	204	204	204	204	204	204	204
	no of species Endemic	81	81	81	81	81	81	81	81	81	81	81
	no of species Threaten	1	1	1	1	1	1	1	1	1	1	1
Reptiles	no of species Known	428	428	428	428	428	428	428	428	428	428	428
	no of species Endemic	41	41	41	41	41	41	41	41	41	41	41
	no of species Threaten	15	15	15	15	15	15	15	15	15	15	15
Swallowtail, Butterflies	no of species Known	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	no of species Endemic	150	150	150	150	150	150	150	150	150	150	150
	no of species Threaten	115	115	115	115	115	115	115	115	115	115	115
Fresh water fishes	no of species Known	1044	1044	1044	1044	1044	1044	1044	1044	1044	1044	1044
	no of species Endemic	80-90	80-91	80-92	80-93	80-94	80-95	80-96	80-97	80-98	80-99	80-100
	no of species Threaten	49	50	51	52	53	54	55	56	57	58	59

Table 4.2 Biodiversity Loss of Aquatic Fish

Country	India	Biodiversity	Loss of Aquatic Fish	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Inland fish production (000 tons/y)			1103	1160	1229	1301	1335		1402	1336	1310	1710	1789	1993
Marine fish production (000 tons/y)			1698	1716	1713	1633	1817	2275	2300	2447	2516	2576	2688	
Total fish export (000 tons/y)				86.87	83.651	85.833	97.17	99.78	110.843	139.419	172	208.602	225.6	
Total fish import (000 tons/y)														

Table 4.3 Biodiversity Wildlife Trade

	Birds	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Birds</i>	Import (000 US\$)											
	Export (000 US\$)											
<i>Reptiles</i>	Import (000 US\$)											
	Export (000 US\$)											
<i>Plants</i>	Import (000 US\$)											
	Export (000 US\$)											
<i>Mammals</i>	Import (000 US\$)											
	Export (000 US\$)											

Country: India
Table 4.4 Biodiversity Habitat Loss

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Original wildlife habitat (000 km²)</i>											
All forests											
Dry forests											
Moist forests											
Grassland/savannah											
Desert/scrub											
Wetlands/marsh											
Mangroves											
Total											
<i>Current extent (000 km²)</i>											
All forests	642.04		640.13		639.18						640.11
Dry forests											
Moist forests											
Grassland/savannah											
Desert/scrub											
Wetlands/marsh											
Mangroves											
Total											
<i>Habitat loss (%)</i>											
All forests											
Dry forests											
Moist forests											
Grassland/savannah											
Desert/scrub											
Wetlands/marsh											
Mangroves											
Total											

Table 4-5 Biodiversity Protected Areas

ENVIRONMENTAL INFORMATION DATABASE

Country	India	Protected Areas	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Nationally protected areas</i>													
Scientific reserves and strict nature reserves (000 ha)													
National parks (000 ha)													
National monuments and natural landmarks (000 ha)													
Managed nature reserves and wildlife sanctuaries													
Protected landscapes and sea spaces (000 ha)													
Total nationally protected areas (000 ha)						13481	129317						
Total no. of nationally protected areas (number)						359	489						
Protected areas as % of total land areas (%)						4.53							
<i>Internationally protected areas</i>													
Biosphere reserves (nos / 000 ha)													
Wet land of international importance (nos / 000 ha)							6 / 193						
Marine and coastal protected areas (nos / 000 ha)							14 / 474						
Water-source protected areas (nos / 000 ha)							5/-						
								5/281					

Table 6 Education

Country: India

ENVIRONMENTAL INFORMATION DATABASE									
	1984	1985	1986	1987	1988	1989	1990	1991	1992
<i>Schools (000)</i>									
Nos. of preschool	103	112	118	148	148	139	154	135	137
Nos. of 1st level school (Primary)	5197	5281	5374	5437	5481	5507	5584	5658	5725
Nos. of 2nd level school (Upper Primary & Higher Secondary)	1887	1954	2061	2123	2175	2144	2196	2317	2358
Nos. of 3rd level school (Colleges for general education + Colleges for professional)	5726						5932	6204	653
<i>Teaching staffs (000)</i>									
Nos. of teaching staff (preschool)	167								
Nos. of teaching staff (1st level) (Primary)	14581	15099	15221	16167	15877	16017	16369	1693	1682
Nos. of teaching staff (2nd level) (Upper Primary & Higher Sec	20192	21672	21784	2257	22652	23118	23318	23814	24353
Nos. of teaching staff (3rd level) (Colleges for general education)	293	3023	3198						
<i>Students (000)</i>									
Nos. of students enrolled (preschool)	1033	1236	1272	1421	1440	1353	1510	1436	1463
Nos. of students enrolled (1st level) (Primary)	83933	87441	89933	92944	95740	97318	99118	101577	103370
Nos. of students enrolled (2nd level) (Upper Primary & Higher	42126	44484	46349	47762	49441	52158	54180	55674	61419
Nos. of students enrolled (3rd level) (Colleges for general educat	4272	4471	5629	5825	6128				62560
Primary school enrollment (male %)	1069	1107	1088	1118			114	1128	1153
Primary school enrollment (female %)	726	767	771	792			855	869	927
<i>Literacy rate</i>									
Adult literacy rate (male %)	4674	572					618	642	6386
Adult literacy rate (female %)	2488	289					337	3919	3742
Percentage of population without any schooling -rural									
Percentage of population without any schooling -urban									
Total literacy rate (%)	3617	43					482	499	5211

Table 7/ Health

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Characteristics of Health											
Nos of physicians (000)	256.5	308.2	320.3	331.6	335.6	368.6	381.9	394	410.8		
Nos of dentists (000)	8.7	9.6	9.7	9.7	9.8	10.5	10.8	11	11.3		
Nos of pharmacists (000)	8 937	9 694	11 208	10 981	15 538	13 23	12 37	10 89			402 2687324
Nos of nurses (000)	170.9	197.7	207.4	219.3	245.4	264.5	311.2	340.2			15 065
Nos of population per physician (000)	2 482	2 647	2 407	2 385	2 374	2 203	2 185	2 157	2 142 16164		2 272
Nos of hospitals (000)	29.2	34.3	35	37.5	39	38.5					
Nos of population per bed (000)	1 178	1 143	1 102	1 086	1 076	1 071					
Nos of population per bed (000)	2197	2174	2129	2140	2214	2229	2243				2395
Total calories consumption (daily per capita)	53.2	52.8	52.7	52	53.1	55	56				
Total protein consumption (gm, daily per capita)	38.3	36.7	36.4	36.4	41	39.6					
Total fat consumption (gm, daily per capita)	2058	2030	1984	1996	2064	2075					
Total vegetable calories consumption (daily per capita)	46.1	45.6	45.3	44.7	45.4	47.2					
Total vegetable protein consumption (gm, daily per capita)	28.8	26.8	26.4	26.5	26.5	29					
Total vegetable fat consumption (gm, daily per capita)	139	144	146	144	150	154					
Total animal calories consumption (daily per capita)	7.1	7.3	7.4	7.3	7.6	7.9					
Total animal protein consumption (gm, daily per capita)	9.5	9.9	10	9.9	10.3	10.6					
Total animal fat consumption (gm, daily per capita)	103	102	100	101	104	105	106				113
Available calories as % of requirement (daily per capita)	55.6	57	56.2	58	58.5	59	59.4	59.9			60
Average life expectancy of male (years)	56.4	56	57	59.1	58.2	58.7	59.3	59.9	60.4		61
Average life expectancy of female (years)	104	97	96	95	94	91	80	91	89		86
Infant mortality rate (per 1000 births)	1800										79
Malnutrition in children under five years (000)											
No of human population exposed to radiation (000)											
Mortality Incidence											
Nos of deaths due to cholera (000)	68	154	71	224	215	72	87	160	55	53	
Nos of deaths due to malaria (000)	247	213	323	183	209	268	353	421	422	329	
Nos of deaths due to tuberculosis (TB) (000)	18 612	19 312	17 845	23 526	24 29		93				
Nos of deaths due to malignant neoplasm (000)	8 594		10 986	11 482			357				
Nos of deaths due to diabetes (000)	295	3 427	3 697	4 23	4 903						
Nos of deaths due to anemia (000)	5 264	6 892	6 272	6 862	7 025						
Nos of deaths due to chronic heart diseases (000)	174	2 775	2 351	2 745	2 4						
Nos of deaths due to pneumonia (000)	11 444	6 617	10 884	17 337	15 196	11 9	30 53		31 32		
Nos of deaths due to influenza (000)	4 598	5 329	5 905	6 48	6 644						
Nos of deaths due to bronchitis and asthma (000)											

Country India

ENVIRONMENTAL INFORMATION DALAIADA

Table 7 Health (cont.)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Mortality incidence (cont.)</i>											
Nos. of deaths due to chronic liver diseases (000)	3 605	3 556	3 536	4 095							
Nos. of deaths due to motor vehicle accidents (000)	29 4	29 8	33 6								
Nos. of deaths due to suicide (000)	50 6	52 8	54 3								
<i>Noise Pollution (only local data available for five stations in Dhanbad for 4 days in 1994)</i>											
<i>Provided by Indian School of Mines, Dhanbad</i>											
Name of the city											
Percent of human population afflicted by noise											
Percent of human population in noise prone areas											
Level of noise in most urbanized cities [dB(A)]											
- Morning											
- Daytime											
- Evening											
- Night											
<i>Health Education</i>											
Nos. of Governmental / non-governmental organizations involved in health education programs (000)											
% of rural population getting health education											
Total annual expenditures on health education (000 US \$)											

Table 8 Poverty

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Total population below poverty line (millions)	317	277	322.1	391.4	423						
Total urban population below poverty line (millions)	64.7	53	70.1	87.4	102						
Total rural population below poverty line (millions)	252	230	252	304	321						
Numbers of absolute poor in rural areas (million)	128		251.418								
Total rural women living below poverty line (million)			148.157								
Access to safe drinking water (urban %)	69		79								
Access to safe drinking water (rural %)	82		73								
Access to safe drinking water (total %)	63	57	78	75	74						
Access to sanitation services (urban %)	28.4		38								
Access to sanitation services (rural %)	0.7		4								
Access to sanitation services (total %)	8	10	13	14	11	14					

Country India

ENVIRONMENTAL INFORMATION DATABASE

Table 9 Agriculture		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Area under agriculture (000 ha)</i>												
Rice	41200	41200	41100	41200	38300	41700	42200	42600	42300	42000	41800	42000
Wheat	24700	23600	25000	23100	23100	23100	23500	24000	23000	23000	24590	24910
Maize	5900	5800	5800	5900	5900	5900	5900	5900	5900	5900	5900	5900
Other food grains (jowar, bajra, ragi, millets, barley)	33800	33300	33900	31000	32700	31800	30300	27900				
Oil seeds and pulses	37338	37718	36933	36197	38208	41289	43116	41877				
Coarse Cereals	41710	39210	39470	39740	36550	36880	37680	36320	33420	34420	33060	33060
Oil seeds (9)	18690	18920	19020	18630	20130	21900	22800	24130	23890	25240	26800	26800
Pulses	23540	22740	24420	23160	21270	23150	23410	24660	22540	22360	22430	22430
Cotton (seed)	7721	7382	7533	6948	6459	7294	7588	7268	7695	7540	7340	7340
Tuber vegetables												
Leafy vegetables												
Sugarcane	3110	2953	2849	3079	3279	3329	3405	3651	3882	3570	3590	3590
Jute & Mesta	1050	1130	1500	1070	960	990	910	1020	1110	930	890	890
Rubber	204	350	223	237	249	266	289	306	325	341	400	400

Agricultural production (000 metric tons)		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Rice</i>												
Rice	60100	58300	63800	60600	56900	70500	74100	74600	73700	72850	78970	78970
Wheat	49500	44100	47000	44300	46200	54100	49700	54500	55100	57210	59130	59130
Maize	7900	8400	6600	7600	5700	8200	9400	9100	8000	9990	9480	9480
Other food grains	25900	22700	19600	19300	20500	23300	24900	23700	18000	26137		
Oil seeds and pulses	24101	22889	22286	21175	21379	22293	26114	28927	26554			
Coarse cereals	33900	31170	26200	26830	26360	31470	34760	32700	25990	36590	30920	30920
Oil seeds (9)	12690	12930	10830	11270	12650	18030	16920	18610	18600	20110	21480	21480
Pulses	12890	11960	13360	11710	10660	13850	12860	14260	12020	12820	13100	13100
Fruits												
Cotton (seed)	1149 48	1531 26	1570 86	1242 9	1148 76	1563 3	2055 96	1771 56	1770 48	1140	1071	1071
Tuber vegetables												
Leafy vegetables												
Sugarcane												
Jute and Mesta												
Rubber	187	198	219	227	254	259	297	330	367	394	400	400
<i>Live-Stock Population And Production</i>												
Cattle (000 heads)	193610	197950	200300	199300	193000	195500	197300	198400	192650	249000	228030	227000
Buffalo (000 heads)	71900	73440	75010	74230	72000	75000	77000	78550				
Pigs (000 heads)	10120	10150	10200	10290	10300	10300	10400	10450	10500			
Goats (000 heads)	99430	99490	102870	103500	105000	110000	112000	117000	117000			
Sheep (000 heads)	51130	52770	54460	55482	51584	54588	55700	44407				
Horses (000 heads)	900	910	920	950	953	960	965	970				

ENVIRONMENTAL INFORMATION DATABASE											
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Live-Stock Population And Production (cont.)											
Mules (000 heads)	130	132	132	134	135	138	139	140	141		
Asses (000 heads)	1070	1100	1200	1300	1328	1400	1450	1500	1500		
Camels (000 heads)	1200	1250	1300	1350	1390	1400	1450	1490	1500		
Poultry (million)	190	192	200	215	260	300	350	380	410		
Duck (million)											
Milk production (000 metric tons)	41500	44000	45600	46700	48400	51450	53900	55700	57600	60200	
Egg production (No. in millions)	14252	16128	17310	17725	18890	20204	21115	21984	22941	23722	
Wool production (000 metric tons)	38	39.1	40	41.1	40.8	41.7	41.6	40.7	39.9	41.2	
Use of Agrochemicals											
Fertilizer production (000 nutrient tons)	39173	43229	54122	54656	67124	67474	69931	7301	7430	731	7944
Nitrogen fertilizer	13419	14603	16965	17031	22896	18221	20511	23616	23701	18743	25567
P2O5 fertilizer	0	0	0	0	0	0	0	0	0	0	0
K2O fertilizer											
Fertilizer consumption (000 nutrient tons)											
Nitrogen fertilizer	5486	56608	57127	56683	72461	79859	75655	8046	8427	8789	9511
P2O5 fertilizer	1886	2005	2079	2187	2721	3014	3221	3221	2844	2669	2945
K2O fertilizer	838.5	808.1	860.1	864.5	1068.2	1168	1308.5	1361	884	908	1064
Fertilizer import (000 nutrient tons)											
Nitrogen fertilizer	2008.6	1615.8	1105.6	174.3	218.8	523.1	412.3	566.1	1152.3	1588.8	1473.2
P2O5 fertilizer	745.2	804.8	279.3	0	407.4	1311.3	1015.7	967.8	727.3	721.1	376.1
K2O fertilizer	871	893.8	839.6	809.1	99.2	1278.1	1325.9	1236.4	1081.2	862.5	1281.7
Fertilizer export (000 nutrient tons)											
Nitrogen fertilizer											
P2O5 fertilizer											
K2O fertilizer											
Insecticides production (tons/yr)											
Insecticides consumption (tons/yr)											
Insecticides import (tons/yr)											
Insecticides export (tons/yr)											
Herbicides production (tons/yr)											
Herbicides consumption (tons/yr)											
Herbicides import (tons/yr)											
Herbicides export (tons/yr)											

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Use of Agrochemicals (cont.)</i>											
Fungicides & Bactericides production (tons/y)											
Fungicides & Bactericides consumption (tons/y)											
Fungicides & Bactericides import (tons/y)											
Fungicides & Bactericides export (tons/y)											
Rodenticides production (tons/y)											
Rodenticides consumption (tons/y)											
Rodenticides import (tons/y)											
Rodenticides export (tons/y)											
Mineral oil production (tons/y)											
Mineral oil consumption (tons/y)											
Mineral oil import (tons/y)											
Mineral oil export (tons/y)											
Plant growth regulators production (tons/y)											
Plant growth regulators consumption (tons/y)											
Plant growth regulators import (tons/y)											
Plant growth regulators export (tons/y)											
Disinfectants production (tons/y)											
Disinfectants consumption (tons/y)											
Disinfectants import (tons/y)											
Disinfectants export (tons/y)											

Table 10 Tourism - International / Internal

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Nos. of tourists (000 number)	1210	1271	1462	1498	1604	1748	1721	1685	18677	17648	
Receipt from tourists (million US \$)	980	1260	1430	1500	1535	1535	1437	1310	1400	1510	
Nos. of hotel rooms (000)	31 402	32 609	30 2	34 574	36 666	42 415	44 431	44 495			
Nos. of beds available (000)	62 804	65 218	60 4	69 148	73 332	84 83	88 862	88 99			

Country: India
Table 11 Transportation

ENVIRONMENTAL INFORMATION DATABASE

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Length of roads (000 km)	1620.5	1636.9	1726.1	1847.7	1938.4	2114	2164.5				
Length of railway (000 km)	61.85	61.836	61.812	61.976	61.985	62.211	62.36	62.5	62.5	62.5	62.49
Total number of airports								116	116	116	
Nos. of cars (000)	1430	1579.2	1747.8	1978.7	2266	2471.1	2789.9				
Nos. of commercial vehicles (000)	1388.5	1599	1658.2	1877.2	2138.2	2317.4	3455.5				
Nos. of railway wagons (000)	365.4	339.6	354	346.8	345.8	349.6	346	346	338		
Nos. of motor boat (000)											
Nos. of diesel locomotives (000)	2.905	3.046	3.182	3.298	3.454	3.61	3.76	3.91	4.07		
Nos. of electric locomotives (000)	1.252	1.302	1.366	1.433	1.533	1.644	1.743	1.871	2.09		
Other locomotives (000)	5.97	5.571	4.95	4.427	3.826	3.336					
Railway traffic (million ton - kilometer)	223800	240600	256500	259400	263600	277300	245300	253800			
Railway traffic (million passenger - kilometer)	172500	196600	214100	222500	221000	226600	233300	317400	315000		

Table 12 Energy (* includes nuclear power also)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Thermal & hydropower production (million KWH)	165130	178408	196255	213945	235485	261571	279954	303954	325989	318133	318133
-Thermal & hydropower use (million KWH)*	169100	183299	201279	219838	242508	267039	286940	310330			345415
Thermal & hydropower export (million KWH)*	111	107	67	30	97	91	95	100			
Thermal & hydropower import (million KWH)*	6	16	170	385	1297	928	1000	1050			
Coal production (000 metric tons)	147400	154200	165700	179700	194600	200900	211600	227400	233500	248700	257800
-Coal use (000 metric tons)	141500	155500	166900	179900	203800	213400	228900	241800	256000	269200	
Coal export (000 metric tons)	120	210	160	170	160	100	110	130	100	120	
Coal import (000 metric tons)	670	2030	2100	2970	4410	5710	5920	6260	7100	8270	
Natural gas production (million m3)	6820	7908	9462	10906	12784	15926	17990	18649	18372	18121	19388
-Natural gas use (million m3)	3969	4685	6655	7662	8832	11070	12464	12766	14441	16116	16340
Natural gas export (million m3)	0	0	0	0	0	0	0	0	0	0	
Natural gas import (million m3)	0	0	0	0	0	0	0	0	0	0	
Crude petroleum production (000 metric tons)	27933	29860	31157	30142	31580	33685	33311	31007	27874	26508	32230
-Crude petroleum use (000 metric tons)	35235	41226	44240	47445	47896	51974	51671	50951	5254	53509	56446
Crude petroleum export (000 metric tons)	6760	2044	0	0	0	0	0	0	0	0	0
Crude petroleum import (000 metric tons)	14620	14811	14534	18043	17712	18919	20793	21813	20977	30309	27349
Power generation from nuclear power plants (million KWH)	4075	4932	5022	5035	5817	4625	6141	5524	6726	5398	5605
Per capita commercial energy consumption (kgs. of coal equivalent)			250		272	288	310	315	317		

Country Year
Table 13 Economy and Employment

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
GDP (billion US \$)	126.53	127.97	127.98	131.36	130.13	121	118.31	87.5	72.9	74.3	
GNP per capita (US \$)	98.7	105.3	109.8	119.8	125.1	123.3	130.9	108.3	96.5	104.5	
GDP savings (US \$ bn)	35.48	42.45	42.89	53.7	58.88	61.25	70.66	58.03	45.89	50.53	91
Inflation - CPI (%)	8.7	7	7.5	9.6	7.9	6.6	11	13.7	10.7	7	
Total foreign debt (billion US \$)	33.8588	41.0213	48.3541	55.8247	58.4672	63.9292	69.1383	71.5569	74.5	79.1	80.7
Total employed persons (000)	24214	24578	25056	25388	25712	25962	26553	26731			
Total unemployed persons (000)	23034	24861	28261	30542	30050	32776	34632	36300	36758		
Unemployment rate (%)											

ENVIRONMENTAL INFORMATION DATABASE											
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Flood Hazard</i>											
Nos. of occurrence		3	4	2	1	3					
Deaths due to flood (000)		1 108	0 462	1 351	1	1 094					
Financial loss due to flood (000 US \$)											
Percent of population in flood prone areas											
<i>Drought Hazard</i>											
Nos. of occurrence	4	11	8	14	5	3	0	3	6	5	
Financial loss due to drought (000 US \$)	8 679 56	13 000 082	9 076 68	5 690 054	11 256 9	601	0	357 6	9 210 44	0	0
Number of crop failure in every five years											
<i>Cyclone *</i>											
Nos. of occurrence	3	5		2	1	4	2	2	2	2	
Deaths due to cyclone (000)	0 668	0 071		0 126	0 532	0 111	0 982	0 418	0 294	0 111	
Financial loss due to cyclone (000 US \$)	25 23	124 78	0	282 19	145 787	853	126 9827	13 894 6	17 292 0	127 510	0
<i>Earth Quake</i>											
Nos. of occurrence			1		1						
Deaths due to earth quake (000)			0 003		0 003						
Financial loss due to earth quake (000 US \$)											
Percent of population in earth quake prone areas (%)											
<i>Landslides</i>											
Nos. of occurrence						1					
Deaths due to landslides (000)						0 016					
Financial loss due to landslides (000 US \$)							0 055				
<i>Forest fires</i>											
Nos. of occurrence											
Loss of wildlife due to forest fires (000)											
Financial loss due to forest fires (000 US \$)											

* includes typhoon and storms

exchange rate (Rs./US\$)

11.89

12.23

12.78

12.97

14.48

16.65

17.94

24.47

30.65

31.37

31.4

Specific laws on EIA (Yes/No)	<input type="checkbox"/> Yes
Nos. of ongoing EIA projects	510

Institutions involved in EIA including their subject of interest

Name of the Institution	NEERI, Nagpur	IIIT, New Delhi	ERM India, Delhi	EEC, Bombay
Subject of interest	Industrial	Industrial, Posts	Industrial	Industrial

Table 15.2 Policies and Institutions Status of environmental monitoring and management

Air quality

Nos of air quality monitoring stations in the country	188
Nos of air quality monitoring stations in each city	
City	
Nos of station	
Legislation available for air quality control (Yes/No)	
Adequacy of existing legislation (Adequate/Inadequate)	
Amount of budgetary allocation (million US \$)	

Hyderabad	Gujarat	Dharmabad	Surat	Fardabab	Shimla	Bangalore	Kochi	Bombay	Madras	Calcutta	Delhi
8	3	4	4	1	2	5	8	3	8	3	9

Yes	Inadequate
No	

Types of air quality parameters usually monitored and environmental standards		Pb (lead)		SO ₂ (sulphur-dioxide)		NO _x (Nitrogen oxide)		CO (Carbon monoxide)		Halon	
parameter	Carbon dioxide	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
yes/no	CO (Carbon monoxide)	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes

standards	2 mg/m ³		30 ug/m ³	30 mg/m ³	0.75mg/m ³	24hour, S A					
(ppm)											

Water quality (both ground water and surface water)

Nos of rivers/lakes in the country		Nos of monitoring stations		Frequency of sampling	
Rivers with water quality monitoring facilities					
Name of rivers		13 rivers			
Lakes/reservoirs with water quality monitoring facilities					
Name of lakes/rivers		480 monitoring stations		weekly	
Cities with groundwater quality monitoring stations					
Name of cities		134			

Legislation available for water quality control (Yes/No)
 Adequacy of existing legislation (adequate/inadequate)
 Amount of budgetary allocation (Yes/No)

Yes
 Inadequate
 No

Types of water quality parameters usually monitored and environmental standards

yes/no standard	Colour/Turbidity		BOD (mg/l)	COD (mg/l)	pH	DO (mg/l)	TDS (mg/l)	Caliform	Hardness (mg/l)	Temperature (degree C)	Toxicity
	Yes	Yes	Yes	Yes	Yes	Yes	WHO IS-10500	CPCB, river	IS-10500	IS-2490	heavy metals, radioactivity IS-2490, IS-10500(1991)
classification											

Table 15.3 Policies and Institutions Signatories in Major Global Conventions

<i>Wetlands</i>	<i>Antarctic Treaty and Wetlands (Ramsar) 1971</i>	<i>World Heritage 1972</i>	<i>Endangered Species (CITES) 1973</i>	<i>Migratory Species 1979</i>	<i>Biodiversity 1992</i>
<i>Wildlife and Habitats</i>	<i>CP, MLR</i>	<i>CP</i>	<i>CP</i>	<i>CP</i>	<i>CP</i>
<i>Oceans</i>	<i>Ocean Dumping 1972/Ship Pollution (MARPOL) 1978</i>	<i>Law of the Sea 1982 P Regional Seas (Regional Agreements)</i>	<i>S</i>		
<i>Atmosphere</i>	<i>Ozone Layer 1985</i>	<i>CRC Control 1987</i>	<i>Climate Change 1992</i>		
<i>Hazardous substances</i>	<i>Biological and Toxin Weapons 1972</i>	<i>Nuclear Accident Assistance 1986</i>		<i>Hazardous Waste Movement 1989</i>	
			<i>CP</i>	<i>CP</i>	<i>CP</i>

CP Contracting Party (has ratified or taken similar action)

S Signatory (has signed but not ratified)

MLR Contracting party to the convention on the conservation of Antarctic Marine living sources

IS Indian standards specified by BIS

References for the Environmental Information Database

To use the reference database

The following pages contain a comprehensive account of the references utilized for each of the variables in the Environmental Information Database. In keeping with the format of the EID, the reference database is organized by table number, with the rows in each table corresponding to the variables in the EID, and the columns representing the reference utilized. The sources are listed by code letter in the next page. An "X" in a cell means that *all* the values in the EID for that variable come from the source corresponding to that column. When values for a variable come from multiple sources, the cells are filled by numerals corresponding to the years for which each source was used, e.g. 1984 is represented by the character '4', 1985 by the character '5', and so on. The year 1994 is denoted by '4*'

As an example, examine the entry in Table 1 1 for Land Deforestation Trade in Forestry Products: Total Roundwood Production. The reference database states that the values for the years 1984 through 1987, 1992, and 1993 were obtained from Jawaharlal Nehru University, and that the values for the years 1988 through 1991 were provided by Ministry of Environment and Forests

Reference

Calculated by TERI
Forest Survey of India
Jawaharlal Nehru University (through MoEF)
Given by Ministry of Environment and Forests (MoEF)
MOEF Annual Report 1993
Wasteland Development Review, National Wasteland Development Board, 1987
Soil Degradation in India, United Nations Food and Agriculture Organization, 1994
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World Resources Institute Database
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Climate Diagnostics Bulletin, various issues
TW Kureishy, "Studies on Mercury, Cadmium, and Lead in Marine Systems "
Doctoral Dissertation, Aligarh Muslim University, India
RK Subramaniam, "Status of the Marine Environment in India"
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Human Development Report, United Nations Development Programme, various years
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"India Poverty, Employment, and Social Services" World Bank Country Study, 1990
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"Disastrous Weather Events" India Meteorological Department
"Effect of environmental pollution due to road traffic on health of Delhi traffic policemen "
November, 1991, CRRI, New Delhi
CPCB Pollution Statistics of Delhi 1996
Ministry of Environment and Forests
India 1991 Population Data Sheet, Registrar General and Census Commissioner
URBAIR -- Bombay City Specific Report, 1995, World Bank
Central Electricity Authority, January 1995

	Table 1.1 Land Deforestation				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
<i>Forest management (Forest area in ha)</i>																																															
Officially managed																																															
Protected																																															
No managed																																															
Sanctuary																																															
<i>Transfer between forestry and other sectors (ha)</i>																																															
Net to settlement																																															
Net to agriculture																																															
Net to industry																																															
Net to rangeland																																															
Net to roads etc																																															
<i>Forest area and loss</i>																																															
Forest and woodland area (000 ha)																																															
% of forest and woodland																																															
Closed forest (000 ha)																																															
Open forest (000 ha)																																															
Deforestation of closed forest (000 ha/ha)																																															
Deforestation of open forest (000 ha/ha)																																															
Deforestation of all forest (000 ha/ha)																																															
Reforestation (000 ha/ha)																																															
Reforestation (000 ha/000 capita)																																															
Trade in forestry products																																															
Total roundwood production (000 m ³)																																															
Bulkwood and charcoal production (000 m ³)																																															
Industrial roundwood production (000 m ³)																																															
Saw logs and veneer logs production (000 m ³)																																															
Sawnwood and sleepers production (000 m ³)																																															
Wood based panel production (000 m ³)																																															
Wood pulp production (000 m ³)																																															
Paper and paper board production (000 m ³)																																															
Import of forestry products (000 US\$)																																															
Export of forestry products (000 US\$)																																															

Table 1 2 Land Degradation

Table 1 3 Land Land Desertification

Table 1	Land	Waste disposal	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
Number of contaminated sites																																													
Waste Production (ton/y)																																													
Municipal waste																																													
Industrial waste																																													
Agricultural waste																																													
Mining waste																																													
Radio active waste																																													
Percentage of waste treated																																													
Municipal waste																																													
Industrial waste																																													
Agricultural waste																																													
Mining waste																																													
Radio active waste																																													
Waste treatment, by methods (ton/y)																																													
Incineration on land																																													
Incineration at sea																																													
Dumping at sea																																													
Fuel blending																																													
Physical/chemical treatment																																													
Solidification/encapsulation																																													
Co-disposal facilities																																													
Landfills for hazardous wastes																																													
Stockpiling of wastes																																													
Export of waste																																													
Sewer discharges																																													
River discharges																																													
Coastal discharges																																													
Waste recycled by category (quantity)																																													
Municipal waste																																													
Industrial waste																																													
Agricultural waste																																													
Mining waste																																													
Radio active waste																																													

Parameter	Test date			Ground water		
	Temperature (°F)	pH	BOD (mg/l)	Most important aquifer	Name of aquifer	Source of pollution (qualitative data)
Suspended Solids (mg/l)						
Nitrate + Nitrogen + Nitrate (mg/l)						
TDS (mg/l)						
Phosphorous (mg/l) as P						
Heavy metals						
mercury (mg/l)						
lead (mg/l)						
cadmium (mg/l)						
copper (mg/l)						
zinc (mg/l)						
chromium (mg/l)						
nickel (mg/l)						
Iron (mg/l)						
Species						
Biota						
Number						

Table 2.1 Water Inland Water Pollution		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
<i>Surface water</i>																																												
<i>Most important river/lake</i>																																												
Name of river/lake		Cauvery																																										
Station		Talai																																										
Test date																																												
Temperature (F)																																												
pH																																												
BOD (mg/l)																																												
Chlorides (mg/l)																																												
Suspended Solids (mg/l)																																												
TDS (mg/l)																																												
Nitrate + Nitrogen + Nitrite (mg/l of N)																																												
Phosphorous (mg/l as P)																																												
Heavy metals																																												
mercury (mg/l)																																												
lead (mg/l)																																												
cadmium (mg/l)																																												
copper (mg/l)																																												
zinc (mg/l)																																												
chromium (mg/l)																																												
Biota																																												
Species																																												
number																																												
<i>Ground water</i>																																												
<i>Most important aquifer</i>																																												
Name of aquifer																																												
Test date																																												
Nitrate (mg/l)																																												
TDS (mg/l)																																												
pH																																												
Chlorides (mg/l)																																												
Sulfates (mg/l)																																												
<i>Sources of pollution (qualitative data)</i> </td																																												

Table 2.1 Water Inland Water Pollution		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	
<i>Surface water</i>																																													
<i>Most important river/lake</i>																																													
Name of river/lake																																													
Station	Tukul																																												
Test date																																													
Temperature (F)																																													
pH																																													
BOD (mg/l)																																													
Coliform (cfu/ml)																																													
Suspended Solids (mg/l)																																													
TDS (mg/l)																																													
Nitrate + Nitrogen (mg/l of N)																																													
Phosphorus (mg/l as P)																																													
Heavy metals																																													
mercury (mg/l)																																													
lead (mg/l)																																													
cadmium (mg/l)																																													
copper (mg/l)																																													
zinc (mg/l)																																													
chromium (mg/l)																																													
nickel (mg/l)																																													
Biota species																																													
number																																													
<i>Ground water</i>																																													
<i>Most important aquifer</i>																																													
Name of aquifer																																													
Test date																																													
Nitrate (mg/l)																																													
TDS (mg/l)																																													
pH																																													
Chlorides (mg/l)																																													
Sulphates (mg/l)																																													
<i>Sources of pollution (Qualitative data)</i>																																													
Name of most important rivers																																													
Name of most important lakes																																													

Table 2.1 Water Inland Water Pollution		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	
<i>Surface water</i>																																													
<i>Most important river/lake</i>																																													
Name of river/lake																																													
Station		Tikish																																											
Test date																																													
Temperature (F)																																													
pH																																													
BOD (mg/l)																																													
Coliform (1000)																																													
Suspended Solids (mg/l)																																													
TDS (mg/l)																																													
Nitrate + Nitrogen + Nitrite (mg/l of N)																																													
Phosphorus (mg/l as P)																																													
Heavy metals																																													
mercury (mg/l)																																													
lead (mg/l)																																													
cadmium (mg/l)																																													
copper (mg/l)																																													
zinc (mg/l)																																													
chromium (mg/l)																																													
nickel (mg/l)																																													
Biota species																																													
number																																													
<i>Ground water</i>																																													
<i>Most important aquifer</i>																																													
Name of aquifer																																													
Test date																																													
Nitrate (mg/l)																																													
TDS (mg/l)																																													
pH																																													
Chlorides (mg/l)																																													
Sulphates (mg/l)																																													
<i>Sources of pollution (Qualitative data)</i>																																													
Name of most important rivers																																													
Name of most important lakes																																													

Table 2.1 Water Inland Water Pollution

Table 2.1 Water Inland Water Pollution		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
Surface water																																												
Most important river / lake																																												
Name of river / lake		Krishna																																										
Station		Tikali																																										
Test date																																												
Temperature (°F)																																												
pH																																												
BOD (mg/l)																																												
Coliform (1000)																																												
Suspended Solids (mg/l)																																												
TDS (mg/l)																																												
Nitrate + Nitrogen + Nitrite (mg/l of N)																																												
Phosphorous (mg/l as P)																																												
Heavy metals																																												
mercury (mg/l)																																												
lead (mg/l)																																												
chromium (mg/l)																																												
copper (mg/l)																																												
zinc (mg/l)																																												
chromium (mg/l)																																												
BOD																																												
Species																																												
number																																												
Ground water																																												
Most important aquifers																																												
Name of aquifer																																												
Test date																																												
Nitrate (mg/l)																																												
TDS (mg/l)																																												
pH																																												
Chlorides (mg/l)																																												
Sulphates (mg/l)																																												
Sources of pollution (qualitative data)																																												
Name of most important rivers																																												
Name of most important lakes																																												

Table 2.2 Water Utilization of inland water

Table 2.3 Water Marine Water Pollution (cont.)		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
<i>Sources of pollution</i>																																										
Domestic waste (added to sea @ 60 l/head/d)																																										
Industrial effluents by coastal industries (m ³ /y)																																										
River run-off (mean) (km ³ /year)																																										
Coastal population																																										
Coastal industries																																										
Transport/oil tanker (oil transported across Arabian sea)																																										
Oil refinery wastes																																										
Oil exploration sites																																										
Sewage and effluents added by rivers to sea																																										
Solid waste and garbage generated by coastal population (@0.8 kg/d/d)																																										
Fertilizer used (@30.5 kg/ha/year)																																										
Pesticide used (@336 g/ha/year)																																										
Synthetic detergent																																										
Table 2.3 Water Marine Water Pollution (cont.)																																										
<i>Sources of pollution</i>																																										
Domestic waste																																										
Industrial effluents																																										
River run-off (urban)																																										
Coastal population																																										
Coastal industries																																										
Transport/oil tanker																																										
Oil refinery wastes																																										
Oil exploration sites																																										

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
Table 3.1 Atmosphere and Climate Air Pollution																																									
<i>Annual emission (ton/y) in most important cities</i>																																									
<i>Annual emission (ton/y) in most important cities</i>																																									
<i>Annual emission (ton/y) in most important cities</i>																																									
Name of city	BOMBAY																																								
CO (Carbon monoxide) in most important cities																																									
CO ₂ (Carbon dioxide)																																									
SO ₂ (Sulphur dioxide)																																									
NO _x (Nitrogen oxide)																																									
Pb (Lead)																																									
CFC (Chlorofluorocarbon)																																									
Halon																																									
CH ₄ (Methane)																																									
<i>Atmospheric concentration (mg/m³ of air)</i>																																									
Name of city	BOMBAY																																								
CO (Carbon monoxide) in most important cities																																									
CO ₂ (Carbon dioxide)																																									
SO ₂ (Sulphur dioxide)																																									
NO _x (Nitrogen oxide)																																									
Pb (Lead)																																									
CFC (Chlorofluorocarbon)																																									
Halon																																									
CH ₄ (Methane)																																									
<i>Suspended particulate matter</i>																																									
Acidity (rainwater pH)																																									
Percentage of population using air conditioners																																									
Total num cities																																									
<i>Source wise emission (ton/y)</i>																																									
Emission of SPM from																																									
Transport																																									
Industry																																									
Agriculture																																									
Live stock																																									
Oil and gas production																																									

Source wise emission (tonnes)		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
Emission of CO ₂ from	Transport																																									
	Industry																																									
	Agriculture																																									
	Live stock																																									
	Oil and gas production																																									
Emission of CO ₂ from	Transport																																									
	Industry																																									
	Agriculture																																									
	Live stock																																									
	Oil and gas production																																									
Emission of SO ₂ from	Transport																																									
	Industry																																									
	Agriculture																																									
	Live stock																																									
	Oil and gas production																																									
Emission of NO _x from	Transport																																									
	Industry																																									
	Agriculture																																									
	Live stock																																									
	Oil and gas production																																									
Emission of Pb from	Transport																																									
	Industry																																									
	Agriculture																																									
	Live stock																																									
	Oil and gas production																																									
	Carbon released annually by deforestation(tonnes/yr)																																									

Source/way emission (activity)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
Emission of CO from	Transport																																								
	Industry																																								
	Agriculture																																								
	Live stock																																								
Emission of CO ₂ from	Oil and gas production																																								
	Transport																																								
	Industry																																								
	Agriculture																																								
	Live stock																																								
	Oil and gas production																																								
Emission of SO ₂ from	Transport																																								
	Industry																																								
	Agriculture																																								
	Live stock																																								
	Oil and gas production																																								
Emission of NO _x from	Transport																																								
	Industry																																								
	Agriculture																																								
	Live stock																																								
	Oil and gas production																																								
Emission of Pb from	Transport																																								
	Industry																																								
	Agriculture																																								
	Live stock																																								
	Oil and gas production																																								
Carbon released annually by deforestation(ton/ha/yr)																																									

Table 3.1 Atmospheres and Climate		Air Pollution		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
<i>Annual emission (tonny) in most important cities</i>																																												
<i>Annual emission (tonny) in most important cities</i>																																												
Name of city	ALL INDIA																																											
CO (Carbon monoxide)																																												
CO ₂ (Carbon dioxide)																																												
SO ₂ (Sulphur dioxide)																																												
NO _x (Nitrogen oxide)																																												
Pb (Lead)																																												
CFC (Chlorofluoro-carbon)																																												
Halon																																												
CH ₄ (Methane)																																												
<i>Atmospheric concentration (ng/m³ of air)</i>																																												
Name of city	ALL INDIA																																											
CO (Carbon monoxide) in most important cities																																												
CO ₂ (Carbon dioxide)																																												
SO ₂ (Sulphur dioxide)																																												
NO _x (Nitrogen oxide)																																												
Pb (Lead)																																												
CFC (Chlorofluoro-carbon)																																												
Halon																																												
CH ₄ (Methane)																																												
<i>Suspended particulate matter</i>																																												
<i>Acidity (rainwater pH)</i>																																												
<i>Percentage of population using air conditioners</i>																																												
Total num cities																																												
Acidity (rainwater pH)																																												
Total num cities																																												
<i>Source wise emission (tonny)</i>																																												
<i>Emission of SPM from</i>																																												
Transport																																												
Industry																																												
Agriculture																																												
Live stock																																												
Oil and gas production																																												

Table 3.2 Atmosphere and Climate Climate chan

Table 4.1 Biodiversity Loss of Biodiversity

Table 5 Population

Table 5 Population		Table 6 Education	
Characteristics of Population		Characteristics of Education	
Total population (million)		A	B
Total fertility rate (per woman)		C	D
Age distribution (%)		E	F
0 - 14 yrs		G	H
15 - 64 yrs		I	J
65 and above		K	L
Sex ratio (female per 1000 men)	X	M	N
<i>Population Growth</i>		O	P
Crude birth rate (Nos. per 1000 population)		Q	R
Crude death rate (Nos. per 1000 population)		S	T
Population density (population per Km ²)	34*	U	V
Annual average population growth rate (%)	X	W	X
<i>Rural-Urban Migration</i>		Y	Z
Rural population (million)		AA	AB
Urban population (million)	X	AC	AD
Population density (p/km ²) - rural		AE	AF
Population density (p/km ²) - urban	X	AG	AH
<i>Schools (000)</i>		AI	AJ
Nos. of preschool	X	AK	AL
Nos. of 1st level school (Primary)	4.2	AM	AN
Nos. of 2nd level school	4.2	AO	AO
Nos. of 3rd level school	X	X	X
<i>Teaching staff (000)</i>			
Nos. of teaching staff (preschool)	X		
Nos. of teaching staff (1st level) (Primary)	4.2		
Nos. of teaching staff (2nd level)	4.2		
Nos. of teaching staff (3rd level)	X		
<i>Students (000)</i>			
Nos. of students enrolled (preschool)	X		
Nos. of students enrolled (1st level) (Primary)	4.2		
Nos. of students enrolled (2nd level)	4.2		
Nos. of students enrolled (3rd level)	X		
Primary school enrollment (female %)			
Primary school enrollment (female %)			
Adult literacy rate			
Adult literacy rate (male %)	44*	50	1
Adult literacy rate (female %)	44*	50	1
Percentage of population without any schooling, rural			
Total literacy rate (*)			501

Table 7 Health	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
Characteristics of Health																																									
Nos. of physicians (000)																																									
47.1																																									
Nos. of dentists (000)																																									
4.1																																									
Nos. of pharmacists (000)																																									
2																																									
Nos. of nurses (000)																																									
X																																									
Nos. of population per physician (000)																																									
4.1* 4.1																																									
Nos. of hospitals (000)																																									
X																																									
Nos. of population per bed (000)																																									
X																																									
Total calories consumption (daily per capita)																																									
4.0																																									
Total protein consumption (gm. daily per capita)																																									
X																																									
Total fat consumption (gm. daily per capita)																																									
X																																									
Total vegetable calories consumption (daily per capita)																																									
X																																									
Total vegetable protein consumption (gm. daily per capita)																																									
X																																									
Total vegetable fat consumption (gm. daily per capita)																																									
X																																									
Total animal calories consumption (daily per capita)																																									
X																																									
Total animal protein consumption (gm. daily per capita)																																									
X																																									
Total animal fat consumption (gm. daily per capita)																																									
X																																									
Available calories as % of requirement (daily per capita)																																									
X																																									
Average life expectancy of male (years)																																									
X																																									
Average life expectancy of female (years)																																									
X																																									
Infant mortality rate (over 1000 births)																																									
4.3																																									
Maternal mortality in children under five years (000)																																									
X																																									
No. of human population exposed to radiation (000)																																									
4*																																									
Mortality incidence																																									
Nos. of deaths due to cholera (000)																																									
X																																									
Nos. of deaths due to malaria (000)																																									
4.8																																									
Nos. of deaths due to malignant neoplasm (000)																																									
467																																									
Nos. of deaths due to diabetes (000)																																									
X																																									
Nos. of deaths due to anemia (000)																																									
4.8																																									
Nos. of deaths due to pneumonia (000)																																									
4.8																																									
Nos. of deaths due to influenza (000)																																									
X																																									
Nos. of deaths due to bronchitis and asthma (000)																																									
X																																									

Table 7 Health (cont.)

Agriculture

Table 9 Agriculture (cont.)		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
Live-Stock Population And Production (cont.)																																										
Mules (000 Heads)																																										
Asses (000 heads)																																										
Camels (000 heads)																																										
Poultry (million)																																										
Duck (million)																																										
Milk production (000 metric tons)																																										
Egg production (No. in millions)																																										
Wool production (000 metric tons)																																										
Use of Agrochemicals																																										
Fertilizer production (000 nutrient tons)																																										
Nitrogen fertilizer																																										
P2O5 fertilizer																																										
K2O fertilizer																																										
Fertilizer consumption (000 nutrient tons)																																										
Nitrogen fertilizer																																										
P2O5 fertilizer																																										
K2O fertilizer																																										
Fertilizer import (000 nutrient tons)																																										
Nitrogen fertilizer																																										
P2O5 fertilizer																																										
K2O fertilizer																																										
Fertilizer export (000 nutrient tons)																																										
Nitrogen fertilizer																																										
P2O5 fertilizer																																										
K2O fertilizer																																										
Insecticides production (tonsy)																																										
Insecticides import (tonsy)																																										
Insecticides export (tonsy)																																										
Herbicides production (tonsy)																																										
Herbicides consumption (tonsy)																																										
Herbicides import (tonsy)																																										
Herbicides export (tonsy)																																										

Table 11 Transportation

Table 11 Transportation	
Length of roads (000 km)	4.7
Length of railway (000 km)	4.9
Total number of airports	-
Nos. of cars (000)	X
Nos. of commercial vehicles (000)	X
Nos. of railway wagons (000)	4.9
Nos. of motor boat (000)	-
Nos. of diesel locomotives (000)	4.9
Nos. of electric locomotives (000)	4.9
Other locomotives (000)	X
Railway traffic (million ton - Kilometer)	X
Railway traffic (million passenger - Kilometer)	4.2

Table 12 Energy (* includes nuclear power also)

Table 13 Economy and Employment

Table 14 Natural Disasters

Table 15.2 Policies and institutions Status of environmental monitoring and management

Air quality	
Nos. of air quality monitoring stations in the country	
Nos. of a. quality monitoring stations in each city	
City	
Nos. of station	
Nos. of station	
Legislation available for air quality control (Yes/No)	
Adequacy of existing legislation (Adequate/Inadequate)	
Amount of budgetary allocation (million US \$)	
Types of air quality parameters actually monitored and environmental standards	
parameter	CO (Carbon monoxide)
yes/no	
standards	
(ppm)	
Water quality (both ground water and surface water)	
Nos. of rivers/streams in the country	
Rivers with water quality monitoring facilities	
Name of rivers	
Lake/reservoirs with water quality monitoring facilities	
Name of lakes/reservoirs	
Cities with groundwater quality monitoring stations	
Name of cities	

Table 15.2 Policies and Institutions Status of environmental monitoring and management (cont.)

Legislation available for water quality control (Y/yes/N/no)								
Adequacy of existing legislation (Adequate/Inadequate)								
Amount of budgetary allocation (Y/yes/N/no)								
Types of water quality parameters usually monitored and environmental standards								
<i>Colour/Turbidity</i>								
Yes/no								
standard								

Table 15.3 Policies and Institutions Signatories in Major Global Conventions

<i>Antarctic Treaty and Convention 1959&1990</i>								
<i>Wildlife and Habitat</i>								
<i>Oceans</i>								
<i>Atmosphere</i>								
<i>Hazardous substances</i>								